



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGIONAL ADMINISTRATOR
REGION 5
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APR 02 2018

Ms. C. Heidi Grether, Director
Michigan Department of Environmental Quality
525 West Allegan Street
P.O. Box 30473
Lansing, Michigan 48909

Dear Director Grether *Heidi*

Thank you for your March 6, 2018 letter outlining the Michigan Department of Environmental Quality's (MDEQ's) plan to verify the results for per- and polyfluoroalkyl substances (PFAS) in residential drinking water samples collected in northern Kent County by Wolverine World Wide, Inc. (Wolverine) and analyzed by ALS Environmental's Laboratory in Kelso, Washington (ALS-Kelso). This response is also a follow up on our March 16, 2018 conference call with EPA Headquarters regarding the appropriate uses of EPA Method 537.

Addressing PFAS Sample Results from ALS-Kelso

As we have discussed, EPA is concerned with the recent suspension of ALS-Kelso from the Department of Defense's (DOD's) Accreditation Program. In response, EPA proposed to MDEQ that Wolverine retest all residences with non-detect PFAS sampling results in private drinking water wells and a portion of residences with PFAS detects. However, since the time EPA proposed this course of action, EPA has learned that Wolverine has:

- 1) offered bottled water to all residents whose private drinking water wells have been sampled by Wolverine;
- 2) followed up on residential well sampling results by installing whole-house filters where perfluorooctanoic acid (PFOA) or perfluorooctyl sulfonate (PFOS) have been detected in the House Street and Wolven study areas;
- 3) installed whole-house filters in those residences that have concentrations above 70 parts per trillion (ppt) in all other Wolverine sampling areas; and
- 4) continued to offer and provide bottled water to residents whose private drinking water wells have been sampled, including in the areas of concern where PFAS has not been detected in private drinking water wells.

EPA appreciates MDEQ's confirmation of this information in its March 6, 2018 letter.

In light of this information, EPA now agrees that immediate retesting of residences with private drinking water well sample results analyzed by ALS-Kelso is not necessary, **provided that, regardless of sample results**, Wolverine continues to offer, provide access to, and recommend the use of an alternative source of drinking water (*i.e.*, either bottled or filtered water) to all potentially impacted residents in the area. These alternative water options should be continued until the site is fully characterized and Wolverine collects follow-up residential drinking water well PFAS samples using Method 537 (see discussion below). In addition, EPA recommends that MDEQ, the Kent County Health Department (KCHD), and the Michigan Department of Health and Human Services reinforce the health department's precautionary message that recommends residents avoid using their private drinking water wells for human consumption and instead consume the alternate water provided by Wolverine. This recommendation should be followed regardless of the PFAS levels found in initial drinking water samples collected by Wolverine, and until further notice is received from the State and KCHD.

Using EPA Method 537 for Any Future PFAS Analysis of Drinking Water Samples

EPA and MDEQ have discussed the various PFAS analytical methods being used by laboratories across the country where the methods used are noted as modifications of EPA Method 537 Rev 1.1 (modified 537). EPA Method 537 is the Agency's standard analytical method to detect levels of PFAS contamination in drinking water, which includes both finished water from public water systems (PWSs) as well as drinking water from residential wells. This method was developed to analyze PFAS compounds in drinking water as part of implementing the third Unregulated Contaminant Monitoring Rule (UCMR 3). As such, EPA recommends the use of Method 537 for analyzing PFAS levels in any water that can be consumed as drinking water (this includes water collected from residential drinking water wells). There are many ground water PWSs across the country that provide little or no treatment to their finished water and these types of PWSs were sampled under UCMR 3 with PFAS analytical results determined using EPA Method 537.

EPA understands that MDEQ has been using a modified 537 PFAS analytical method that involves isotope dilution in its statewide PFAS monitoring efforts for both ground water monitoring wells used to investigate contaminant plumes and residential wells used for drinking water. While isotope dilution is not an EPA-approved modification of Method 537 for drinking water samples, EPA understands that isotope dilution practices are being used by many commercial laboratories to determine PFAS levels in ground water samples (particularly ground water samples from contaminant monitoring wells that are not used for drinking water.) We are not aware of any consistent sample collection guidelines when using these modified methods, nor are we aware that the modified methods have been validated or systematically assessed for data quality.

Currently, there are no standard EPA methods for analyzing PFAS in non-potable groundwater, surface water, wastewater, or solids. However, EPA is developing robust analytical methods for PFAS in environmental media other than drinking water, including a direct injection method and a solid-phase extraction/isotope dilution (SPE-ID) method -- based on DOD's method. EPA is currently developing a new method to analyze other, shorter chain PFAS in drinking water samples, and plans to expand the number of analytes that can be quantified in drinking water samples using Method 537.

Since PFAS are not regulated under the Safe Drinking Water Act, MDEQ may develop and implement PFAS analytical methods for sampling of drinking water without EPA concurrence. We understand the challenges of identifying the appropriate PFAS methodology that should be used for analyzing PFAS levels in different types of environmental samples and appreciate your continued statewide efforts to

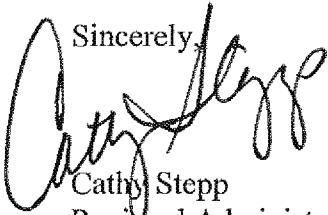
investigate the extent of PFAS contamination. However, in the absence of data demonstrating the comparability of these methods with Method 537, EPA is unable to comment on the data quality and reliability of PFAS results for residential drinking water wells determined by analytical methods other than EPA Method 537.

As we have discussed, some laboratories are using different PFAS methods for analysis, which can create variability in results among labs. Therefore, it is important for Wolverine to ensure that the laboratories being contracted to conduct the PFAS analyses are using careful quality control measures to ensure PFAS results are accurate. MDEQ's data quality reviews and split sampling efforts are reasonable steps for Michigan to take for verifying the efficacy of the methods being used to analyze PFAS levels. It is important to note that if EPA Method 537 is not used by the laboratories when analyzing PFAS levels in the residential drinking water well samples, EPA will not be in a position to address any anomalies identified in the data evaluations conducted as you propose in your March 6, 2018 letter.

EPA is strongly committed to supporting the State of Michigan in its efforts to reduce exposures to PFAS. We appreciate you keeping EPA apprised of your response efforts to the PFAS contamination in Northern Kent County. EPA will continue our efforts to provide MDEQ with technical assistance and advice on PFAS and drinking water issues, including sharing the latest information from EPA's cross-agency efforts to address PFAS.

Again, thank you for your letter. If you have any questions, please do not hesitate to contact me or have your staff contact Heather Shoven of the Region 5 Water Division at (312) 886-0153.

Sincerely,



Cathy Stepp
Regional Administrator

cc: Ms. Carol Isaacs, Governor's Office
Mr. Mike Zimmer, Governor's Office
Ms. Polly Synk, Michigan Department of Attorney General
Ms. Susan Leeming, External Relations Deputy Director, MDEQ
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